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I.—A PHYSICAL INTRODUCTION

103 197 101 133 ROUMANIA owes its name to the rustic Latin speech of the Roman provincials of Moesia and Dacia, impressed on the region in a period before language had acquired its later powers of tenacious resistance to fundamental change. It is true that subsequent contacts gave the local language a large number, perhaps even a majority, of Slavonic words, emphasising the country's links with eastern Europe, but the associations with the west were actively revived in the nineteenth century, when there was also a reaction against the connecting of Roumania with its southern and south-western neighbours as a Balkan State as had seemed natural to those impressed by the results of Turkish rule. These varying links of Roumania are understandable from a study of its physical features. The eastern projecting arc of the Carpathian Mountains and the Transylvanian Alps is, physically, as well as in a large measure culturally, an eastward outpost of western Europe standing out as a mighty rampart over against the south Russian steppe and its continuation into the loess-floored Polish platform. The curve from the Transylvanian Alps southward past the Iron Gates also connects them with the Balkan peninsula.

133 CENTRAL EUROPE, farther west, includes broken remnants of old (Permo-carboniferous) mountain systems passing through south Ireland, south Wales and south England as well as through Brittany, the Ardennes and the Vosges to the hills of middle Germany between Hannover and Frankfürt-a-M. Brittany lies mainly at low levels but most of the other elements of this old system have been lifted again into the round-shouldered hills, sometimes with extensive remains of old plains now at considerable heights, and usually with deep-cut stream lines that have often worked their way along fault lines. To the south of this old mountain-system stand the Alps, some of which incorporate the results of refolding of older mountain fragments.

THE GREAT ARC of the Carpathians and Transylvanian Alps shows relationships with both these great schemes. Old, Permo-carboniferous mountain blocks were refolded in the upper Cretaceous and again in the early Tertiary period, in the latter of which the Transylvanian platform, between

133 the Apuseni and Bihor (Bihar)* mountains on the west and the Carpathians on the north-east and east, seems to have been let down. In this process it became outlined against its mountain frame largely by a series of faults and it was subsequently covered by new deposits. The great folding notable in the Alps further west, so active in the mid-Tertiary period, was apparently of short duration in north Roumania, but seems to have been continued on to Pleistocene times in the Transylvanian Alps on the south, with much faulting giving the impressive rise from the south and east to the line of heights. There was also in Tertiary times a great volcanic outburst that added a broad zone of highland on the west flank of the Carpathians from the two Bistrița rivers southwards to the northern part of the Olt (Alt) valley. In the Pleistocene period earth movements seem to have increased the differencebet ween highlands and lowlands, and they were not uniform, for Pliocene deposits that lie 1,000 to 1,200 metres above sea at Borsec (Borszek) and Bilbor (Gyergyo-Belbor) are at only 500 to 700 metres further north. Again, remnants of the old land surface worn down before the Miocene movements and known to geologists as the Borescu platform, are at 1,200 to 1,300 metres in the Bihor and Apuseni Mountains, but at 2,000 metres in parts of the Transylvanian Alps. These examples suffice to show that these relatively recent movements have been more marked in the south, where, as a result, the contrast between Wallachia below and the mountain wall above is so splendid a feature. It seems that, already before the earth movements of the Pleistocene exaggerated the contrast just named, streams had eaten back through the mountain walls, for example, the Olt, or had linked themselves to and captured streams running between the mountain lines, for example, the Jiu. The Pleistocene period obviously brought great changes both through movements of land-blocks and through its climatic oscillations which were on a grand scale. Gorges were deepened as the mountain wall rose or Wallachia and Moldavia sank, and tributary streams were made to cut most impressive ravines that give the neighbourhood of Sinaia such a romantic character. Cirques near some of the highest hill tops preserve the direct evidence of ice action, but farther down there are few, if any, evidences of hanging

* Strictly speaking, the term Bihor applies only to a small section of these mountains (see Fig. 1) but is often used in a more comprehensive sense.

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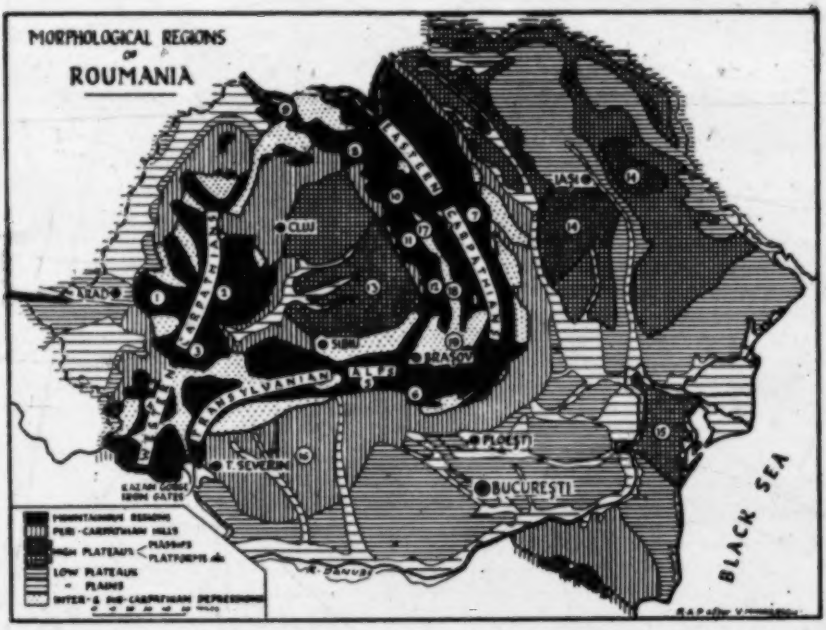

FIGURE 1. The division near Brașov between the eastern Carpathians and the Transylvanian Alps should be noted. The term "Western Carpathians" is used by Mihailescu to include regions 1-4. The Dobrogea is classed by Mihailescu as a "mountainous region" but is shown here as a "high plateau" because it is of Hercynian age. The numbered regions are: (1) Bihor, (2) Apuseni, (3) Poiana Rusca, (4) Banat, (5) Fagaras, (6) Bucegi, (7) Ceahlau, (8)-(12) Volcanic Mts., (13) Transylvanian Plateau, (14) Moldavo-Bucovinan Plateau, (15) Dobrogea, (16) Oltenia, (17) Giurgeu (Gyurgyo), (18) Cluc (Cic), (19) Treisesane.

valleys, and it seems that the topography has been very much adapted since the latter part of the Ice Ages of the Pleistocene. The cutting of ravines is demonstrated magnificently in the case of the Iron Gates of the Danube.

THE above short historical or evolutionary summary of the physical geography may now be supplemented by a more definitely regional survey, the main features of which are illustrated in Fig. 1.

THE CARPATHIAN MOUNTAINS are made up of overlapping arcs, the main series including mainly altered Palaeozoic

133 and Mesozoic rocks, many of which have become crystalline. One of the main arcs forms the axis of the eastern Carpathians from just beyond the Czechoslovakian frontier to the northern border of the Olt basin; some rock west of Sinaia, much farther south, is sometimes considered an outlying part of this arc. The next main axis starts west of Braşov and stretches (with the name of Fagaraş Mountains and sharper relief than the previous arc) westward to the Banat, forming the Transylvanian Alps. In the west a third curve begins south of the last mentioned, in Oltenia, and sweeps around southwards to the Balkan mountain-line. This sweeping curve is heavily cut by faults, and streams working back along fault lines and other weak bands finally tapped the Hungarian basin so that its drainage poured over and deepened the cuttings to form the unique defile of the Kazan with the Iron Gates. The floor on which Pleistocene deposits accumulated in parts of the Hungarian plain lies 100 metres below the level of the rock under the Iron Gates, a sufficient indication that the tapping is a recent affair, as indeed the scenery of the long gorge abundantly testifies by the freshness of its great precipices arising direct from the powerful stream which is in places some 70 metres deep.

On the east side of the eastern Carpathian axis a long belt of Flysch, i.e. Mesozoic and Tertiary folded rocks, forms a subordinate mountain zone of varying width from Poland southwards to the Dambovița valley west of Sinaia.

On the west side of the eastern Carpathian axis a broad zone of volcanic accumulations stretches from the two Bistrița rivers northwards to the north of the Olt basin, but this zone is made less of a barrier by the fact that streams have sawn their way down through even this rock.

The Transylvanian Alps, especially in the zone known as the Fagaraş Mountains, almost reach an alpine height and character, but, even there, the greatest height is only 2,536 metres (8,320 feet) and in the eastern Carpathians the chief peak, Ceahlau (Ciahlau), attains only 1,908 metres (6,260 feet). Permanent snow and ice are therefore unknown at present and water-effects are much more prominent as factors of surface form than ice-effects. The results of block-uplift and faulting strike the observer, and undulating stretches of flowering high pastures dominate steep wooded slopes that bound terraced valleys often of a narrow kind.

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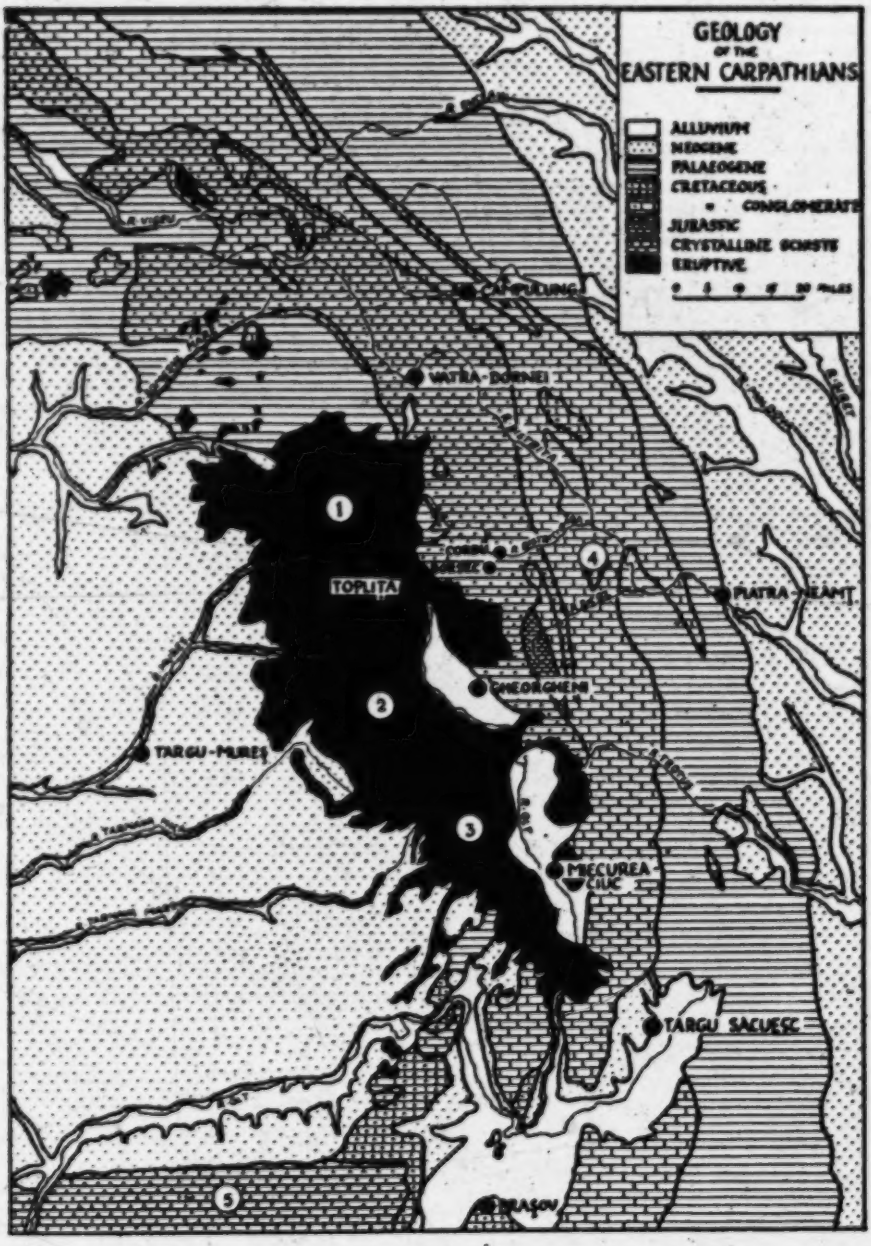

FIGURE 2. (1) Caliman (Kelemen), (2) Gurghi, (3) Harghita (Hargitta), (4) Ceahlau, (5) Fagaraş

133 The prominence of the main axis of the eastern Carpathians north of the Olt basin and the occurrence there of the volcanic belt give to the mountain zone a strength it lacks further south where it is more broken in the zone along which the main axis is buried beneath later formations. When the south-east corner of the arc is turned heights increase and we approach the Transylvanian Alps with their deep-cut southern slopes and especially the through gap of the Olt. The high pastures, to a considerable degree isolated from the valley bottoms, are one of the most important characteristics of the country and have greatly affected its historical and economic evolution. Passes through the eastern and south-eastern Carpathians have also been of great importance for communication between the Russian steppe and the Moldavian platform on the one hand and the Transylvanian and Hungarian basins on the other. It is along these ways, rather than *via* the Danube at the Iron Gates or along detours near them, that movements of culture spread across, eastwards or westwards, in ancient times.

THE BELT east of the Carpathian arcs is generally called Sub-Carpathian and in its structural features it is obviously related to the mountains, but in its denudation it is more akin to the Moldavia-Bucovina-Bessarabia platform generally. This is mainly the result of Pliocene denudation, and there are traces of a higher platform above it, and a lower one beneath, the latter showing that after the main platform was developed there was some uplift and rejuvenation of streams. Considerable areas, especially along the rivers Siret (Sereth) and Prut (Pruth), are loess-covered, but large areas between 47° and 46° N. lat. have Pliocene formations at the surface. To the south again, towards the lower Danube, loess covers most of the country.

THE extent to which a direction parallel or slightly oblique to the Carpathian curve is developed in the drainage system is a feature of the land east of the Carpathians which contrasts markedly with the Wallachian drainage scheme. In Wallachia the long continuance of uplift of the Transylvanian Alps as above mentioned has greatly emphasised the southward slopes and a great number of streams run nearly at right-angles to the mountain axis across a plain covered by loess save in the west (Oltenia). These streams bunch on their way to the Danube and the eastern ones naturally

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The road leading down to the Bicaz gorge which the river has cut through Cretaceous rocks just to the south of Ceahlau. *Photo: Miss M. Vines.*

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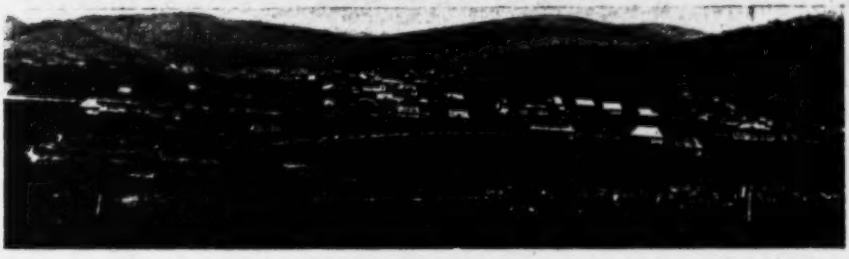
View looking across the tectonic basin of the upper Olt. *Photo: J. Cvijic.*



Bilbor—a characteristic "dispersed" settlement in a small intermont basin, most of the floor of which is given over to the production of hay. *Photo: J. E. Dunlap.*

facing page 12

133 trend eastwards as they go. Wallachia has a far greater proportion of its surface less than 100 metres above sea level than has Moldavia and the rise to the mountains is far more regular, as one would expect in view of the simple, consequent, character of much of the river system.

THE DOBROGEA beyond the lower Danube is not touched upon in the remainder of these studies, which are concerned with parts of the Carpathian region, but, for the sake of completeness, it should be explained that the Dobrogea is a platform extending northwards from the eastern end of the Balkan Mountains, based on a Permo-carboniferous mountain scheme which has been planed down completely, but these older rocks emerge towards the north though the land is low. The block they form is responsible for the main bends of the lower Danube which turns north when it meets the block and bends east again at the north-western corner of the block. There are considerable areas of loess on the eastern and southern parts of the platform.

TURNING now to the area within the Carpathian arc, the historic Transylvania, we note that the land is almost all more than 300 metres above sea level, a great part being over the 500 metre contour. The Transylvanian platform, at levels between 300 and 1,000 metres, is framed by the Carpathians on the east, the Transylvanian Alps on the south, and the Bihor and Apuseni Mountains on the west, save that in the last direction the westward-flowing Mureş (Maros) river occupies the depression south of the Bihor block and drains most of the platform save the extreme east and south-east, where the upper Olt takes a complex course dictated mainly by structural features. The Someş (Szamos), flowing like the Mureş to the Tisza (Theiss), drains the lowland between the north of the Bihor block and the Carpathians. The chief city of Transylvania, Cluj (Klausenburg, Kolozsvar) is situated below the north-east of the Bihor block. From the western part of this block the land grades down through the Banat of Timişoara (Temesvar) on to the Hungarian frontier and the Tisza.

THE TRANSYLVANIAN platform within its mountainous frame is floored in many parts by Pliocene or late Miocene deposits and true loess is not characteristic. It does, however, occur west of Transylvania in the plains towards the Hungarian frontier.

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The Visit to Mt. Ceahlau.

One of the most interesting excursions botanically was that made to Mont Ceahlau, which forms part of the Moldavian Carpathians and rises in its most elevated part to just over 1,900 metres.

The mountain itself is formed of Cretaceous Flysch which is much folded; near the summit there were banks of sandstone and excellent examples of conglomerate.

Unfortunately, the mountain was a considerable distance from Borsec, necessitating a start at 6.30 a.m. and a long journey by car. As the same journey had to be made on the homeward route much less time was spent upon this interesting mountain than one would have liked. The ideal would have been to have spent at least one night in the well-appointed alpine "Cabine" upon the summit. With the exception of the climb to the Peştera hut after leaving Sinaia, Ceahlau was the only really typical sub-alpine region visited during our stay in Roumania. As we drove along the

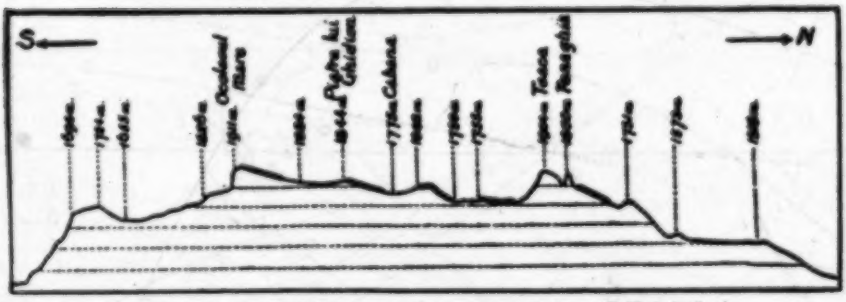

Fig. 3—Profile of Mt. Ceahlau seen from the east (after E. Nyárády)

narrow road by the side of the small tributary stream, to the Durau monastery from which the ascent was made, the following plants were noticed: *Myricaria germanica*, *Petasites albus*, *Salix incana* and the large yellow-flowered *Telekia speciosa*; the three first-named are typical plants found in the neighbourhood of stream beds in such regions, the other had never been seen previously by any member of the Vegetation Group.

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Near the summit of Ceahlau, showing zone of mountain pine (*Pinus mugo* ssp. *mugo*)—sub-alpine "Krummholzregion." The pine is seen in rounded clumps on the mountain slopes, but covers a large area on the flattened summit (see Vegetation notes).

Photo: W. J. Fleure.

[facing page 24]

137 *sitifolia*, *S. aizoides*, *S. aizoon*, *Erysimum Witmanni*, *Phyteuma orbiculare*, *Silene Zawadskii*, *Onobrychis montana var. transilvanica*, *Cerastium alpinum*, *C. lanatum*, *Oxytropus campestris*, *Alsine gerardi*, *Campanula alpina*, *C. carpatica*, *Alyssum repens* (endemic), *Rhinanthus alpinus*, *Rhodiola rosea*, *Sedum atratum*. In the cracks in the rocks where moisture collected were noted *Pinguicula alpina*, *P. vulgaris*, *Saxifraga aizoides*, *S. androsacea*, *Viola biflora*, *Arabis alpina*, *Achillea Schurii*, *Biscutella laevigata*, and *Androsace lactea*.

It was obvious that to make a detailed study of this interesting mountain with its forest, plateau, gullies, scree slopes, etc., and other varying ecological factors, a much longer time would have been necessary than was possible under the conditions of our visit to the country.

The Walk by Way of Bilbor, Paltiniş, Vatra Dornei, etc., and down the Bistrita River by Timber Raft to Broşteni (Brosceni).

133 This interesting excursion was made by a number of the
233 party, and afforded a very good opportunity of seeing the country as some fifty miles were covered on foot in two days. We passed over fine slopes and through delightful valleys with their meadows bedecked with many species of flowering plants. There was time during such a walk only to notice the most salient features of the vegetation. We, however, saw hillsides where sheep were grazed quite to the top, also
[342] a mountain dairy where they were being milked. The temporary shelters for those cropping the hay in the valleys at some distance from their usual habitations were interesting, and the whole family appeared to sleep there and cook their meals till the area had been cleared.

531 During our stay at Vatra Dornei, through the kindness of
346 the mayor and the prefect of the district, we were taken by car over a mountain pass down to Campulung and from thence to the wonderful walled monastery of Moldoviţa (Moldawitza) with fine sixteenth-century frescoes covering
313 its walls. The chief point of interest from a vegetation point of view was the fine spruce forests which we saw and in which felling was in progress, the logs being pushed down the mountain side to timber carts at the bottom. The next day we had evidence of the importance of the lumbering industry

313 as we proceeded down the Bistrița river on a raft of spruce logs to Broșteni. In this way thousands of logs are transported by the current to saw mills lower down the stream. Lumbering was seen *en route* as we passed between slopes covered with fine spruce forests with here and there beech woods and also areas covered with birch.

LEAVING the raft at Broșteni we proceeded to Borsec by car and on the way saw an interesting effect of indiscriminate deforestation. On the slopes far too many trees had been cut down and a huge gully had been formed by a landslide ; a

Gullies and detrital fans resulting from deforestation in Bistrita valley.

house had been completely swept away and near by the soil was level with the top of the fencing round another house (see illustration above).

137 [133] BUDACUL (5,800 feet) was another mountain visited by members of the Vegetation Group. Spruce forest covered the slopes to a height of about 5,000 feet and there were no rocks. The last 500 feet were covered with mosses as well as *Festuca sp.* and the usual three *Vaccinia* with dwarf juniper (*Juniperus nana*). *Veratrum album* and *Hieracium* were the dominant plants in association with those mentioned on the summit, and in the woods below the following occurred : *Chrysanthemum rotundifolium, Scleranthus uncinatus, Scorzonera rosea, Ajuga genevensis, Meum*

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Captain and crew. *Photo: Dr. C. P. Sandgren.*

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Passengers.

These two photographs give a good impression of the gorge-like character of the transverse section of the Bistrita where it is cutting through crystalline schists. *Photo: R. A. Pelham.*

[Facing page 48]

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Shooting the rapids on the Bistrita.

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Harvesting by hand on the level Danube plains.

The above illustrations from Nicolo Iorga's Journal to the U.S.S.R.

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Spinning with a distaff—an occupation symbolical of the traditional life of the Rumanian peasantry in the hill country.

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PLATE VIII

4:Fleure S-5 (no date)1936 EDl Rumania EDl

VII.—CORBU: A CARPATHIAN VILLAGE

I. THE COMMUNE AND ITS INHABITANTS

Position.

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The village of Corbu is situated in the eastern Carpathians at a height of 700 metres above sea-level. It stands just to the east of the main water divide, and in pre-war days was included within Austro-Hungarian territory, the boundary cutting across the Bistricioara valley a few miles below the village.

The commune sits astride one of the Carpathian passes, the Bistricioara valley linking up with that of the Mureş on the one hand and of the Bistriţa on the other to form a continuous route from Transylvania to the Moldavian Plain. Its position naturally made it the centre of a good deal of fighting during the War, and the blasted spruces on the slopes above the village are grim mementoes of the struggles that took place.

Physical Features.

The physical geography of the commune is comparatively simple. The Bistricioara river, which cuts the commune into two unequal segments, is the principal feature. On either side it receives tributary valleys for the most part normal in profile, though in one or two cases a steep-sided and narrow lower section gives place higher up to somewhat broader, flat-bottomed stretches. Indeed, the upper Bistricioara itself winds its way through a fairly extensive intermont basin of this kind in the commune of Bilbor just before entering that of Corbu.

At one point the main valley is constricted by an outcrop of Porphyry which appears formerly to have extended right across the present course of the Bistricioara. It has been breached, however, leaving a truncated spur running out from the south side of the valley and affording excellent views both up- and down-stream. Largely as a result of deforestation the crystalline schistose and gneissic slopes which rise steeply on either side of the main valley are scored with numerous re-entrants, the masses of detrital

133 material eroded therefrom being spread out fanwise along
361 the edge of the alluvium. Higher up, small alp-like terraces appear, giving place to precipitous slopes once more where calcareous rocks of Triassic and Jurassic age occur.

132 CONCERNING climate and vegetation little need be added to
361 the accounts already given of the Eastern Carpathians as a whole. In the case of climate the most important features to be borne in mind are the risk of late summer storms that limit the ripening period for grain, and the winter snowfall which creates a close season for agriculture.

THE VILLAGE.

361 CORBU has been tentatively classified as a "dispersed" type of village, though it is clear from the photographs (Plate IX) that the narrowness of the valley has rather limited the extent of the dispersion and has given rise to a plan resembling that of the "street village" of Western Europe. Closer examination, however, will reveal a certain looseness of structure, especially where a slight widening of the valley occurs near the confluence of a tributary stream, and it is very probable that if the same village had been founded in a broad flat upland area the houses would have been spread out as in Bilbor (see Plate I).

PEASANT HOUSES.

342 A GROUP of typical Roumanian farmsteads is illustrated in Plate X whilst the plan on page 67 shows in detail the lay-out of the one depicted on page 43. The principal features in each case are clear. The dwelling houses, of which there are frequently two to a farm, can usually be distinguished by their bright colour-washed walls. There is an abundance of local stone, but the crystalline rocks that are nearest to hand are very intractable, and, although they are employed for the foundations, the superstructure is almost invariably of wood. In Lower Borsec, which is just visible in the distance in Plate IX, an outcrop of Travertine provides a much more easily-worked material, and is very freely employed, but its use does not appear to extend into Corbu. The walls of the Corbu houses are usually built of roughly-squared, less frequently of sawn, timber, to which, in the better-class houses, laths are nailed to form a key for

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Corbu—view from top of porphyry spur looking down-stream. Arable land on the valley floor is devoted mainly to the cultivation of maize. On the right in the foreground lucerne is seen stacked on poles. The lower portions of the steep hill-sides have been cleared for hay meadows, but continuous stretches of forest clothe the upper slopes.

Photo: R. A. Pelham.

Corbu—looking upstream towards Borsec.

Photo: R. A. Pelham.

[facing page 64]

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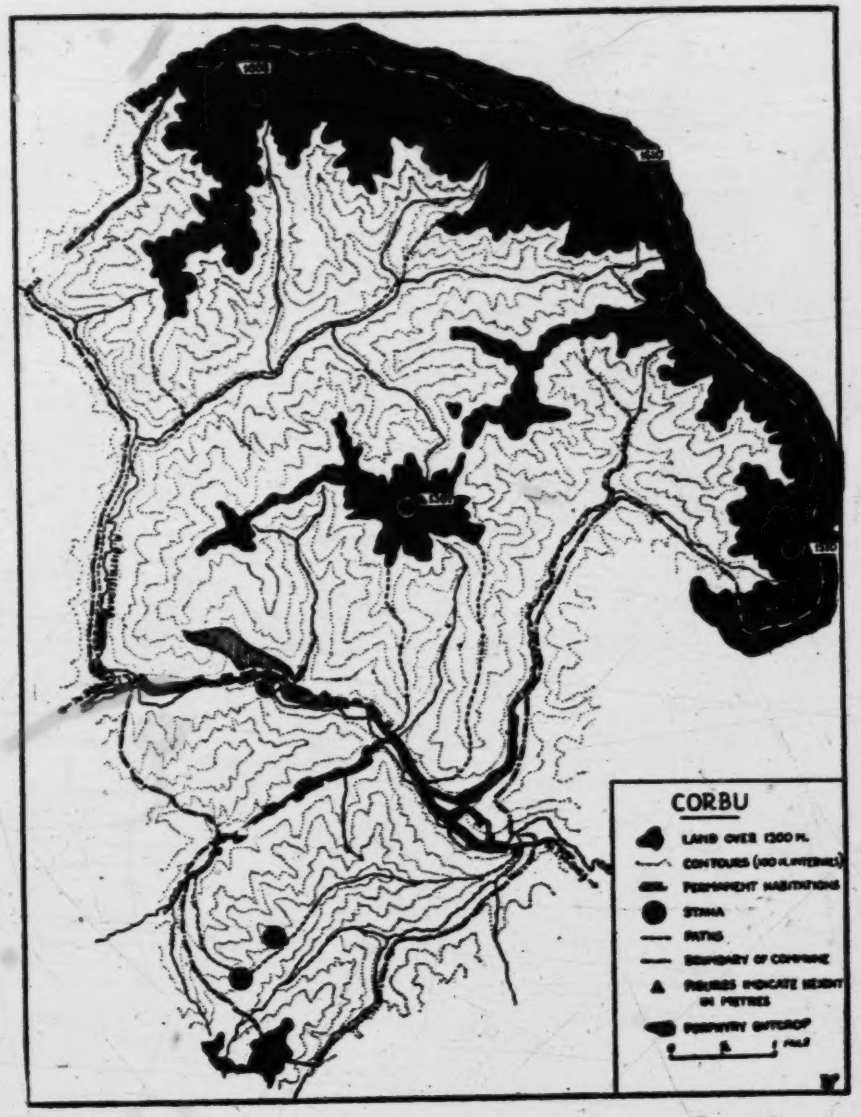

Fig. 9

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PLATE X

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Hay meadows on deforested slopes above the limits of cultivation at Corbu. Although this is the upper section of a valley tributary to that of the Bistricioara, it is much broader than the narrowly constricted lower section.

Photo: R. A. Pelham.

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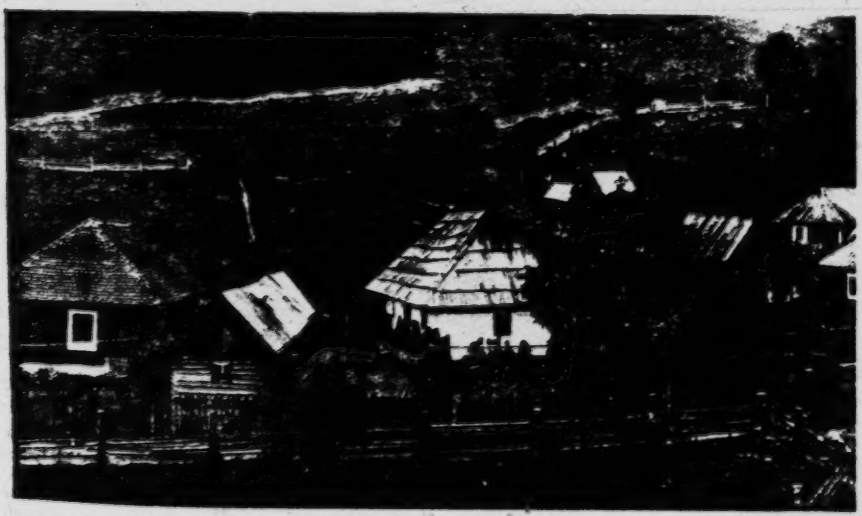

Typical Roumanian farmsteads in Corbu. The houses are roofed with shingles, the outbuildings with boards. The house in the centre has the characteristic louvre in place of chimney, and its walls are of timber with plaster covering. Hemp is drying on the verandah. The mud caulking in the outbuilding is clearly visible.

Photo: R. A. Pelham.

[facing page 65]

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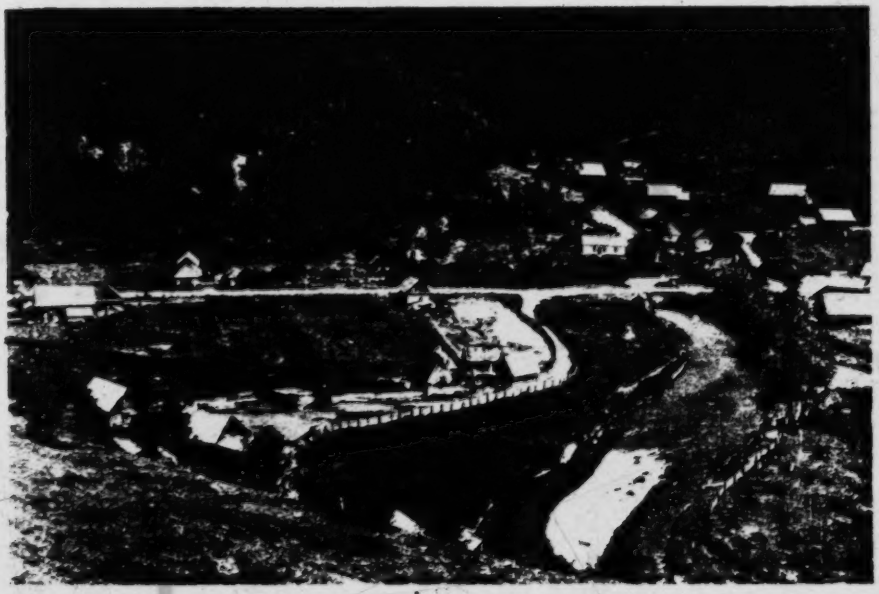

This is part of the area mapped in Fig. 11. The photograph is taken from the top of the porphyry spur shown in Fig. 9. *Photo. R. A. Pelham.*

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A peasant holding at Corbu in process of sub-division. A son about to marry is erecting a house (seen on left) on his share of his father's land. The parental farmstead extends across the right-hand half of the picture. A strip of maize is seen in the foreground and a small patch of hemp on the extreme left, close to the new house. For plan of holding see Fig. 11. *Photo: R. A. Pelham.*

[facing page 68]

000 and the Cyrillic script invented for Slavonic purposes came to be used for religion, even in Roumania. Cities and towns were as yet hardly born in central and east-central Europe.

In the tenth and eleventh centuries, as the Dark Ages were passing away in the west, the idea of the city spread eastwards from the Rhine, sometimes under the leadership of the Church, sometimes around a military leader, sometimes through the planting of colonists by a leader. The Magyar kings accepted Christianity and were drawn into this current of activity, and Transylvania was a frontier land that needed to be developed and guarded. A people of transhumant shepherds and lowly cultivators scattered over a mountain territory was as yet too weak to do this or to resist effectively, while it had no reason to attach itself to the Magyar power, which had different linguistic and religious associations. The Magyars established allied Szekler peoples within the arc of the eastern Carpathians, apparently to some extent as a guard for the passes. They also brought in Saxon immigrants to establish cities as well as villages, and the Teutonic knights and Magyar aristocrats also came to add to the complexity. Szekler and Saxon were Roman Catholic, so a religious complication was added to the linguistic one, and this complexity was further increased when the Saxon element became Protestant on a Lutheran basis, while Unitarianism developed among the Magyars, and the Uniate scheme spread in the border zone between Catholic and Orthodox.

133 Beyond the old Dacia, that is outside the Carpathian bastion, the plains of Wallachia and Moldavia long were highways of barbarian warriors, while their lands nearer the hills are floored by large quantities of boulder-strewn outwash from old sub-glacial conditions in the mountains, so that the areas of more cultivable alluvium are, in the hill country, largely 369 riverside zones. The development of a measure of urban life 361 apparently came later here than in Transylvania, and it may owe something to the Saxon ideas expressed in Transylvania, though neither Saxons or Szeklers are present, and the characteristic Saxon house type with its great arched doorway is completely absent, as is the walled town. The Transylvanian Saxon village (note the villages called Cristian near Sibiu and near Braşov) might have a fortified enclosure around its church, a centre of refuge and of authority. How far analogous developments outside the Carpathian arc are due

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The Transylvanian Alps with Negoiu.

Olt Valley. View of the valley taken from the bridge at Calimanesti.

[Page 16a]

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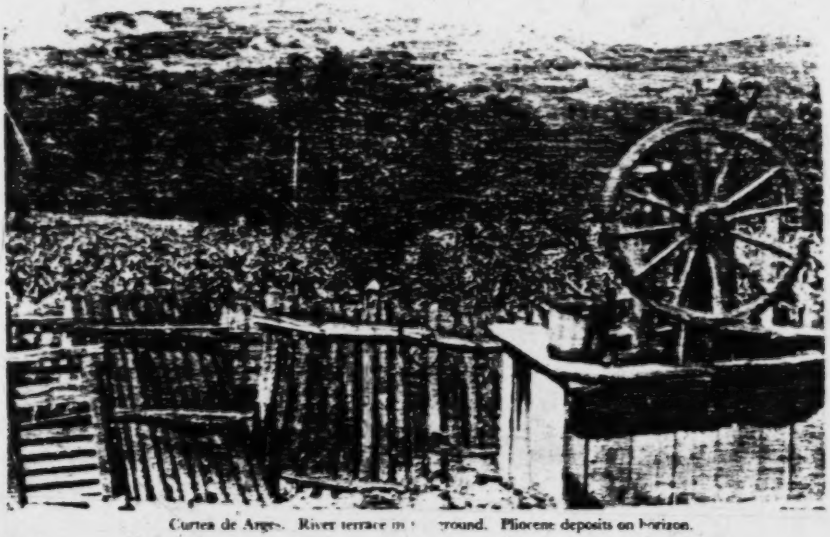

Curtea de Arges. River terrace in foreground. Pliocene deposits on horizon.

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Biserica Domneasca, Curtea de Arges (1343), within a fortified enclosure.

[Page 16 B]

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THE ARGEŞ DISTRICT

101 133 THE EXTENDED ROUMANIA that was organised after 1918 includes the old areas of Wallachia, Dobrogea, Moldavia, Bessarabia, Bukovina, Transylvania and Timişoara, of varied allegiance before the World War, but all containing from early historic times onwards a proportion of Roumanian-speaking people. Transylvania is the mountain bastion with the eastern Carpathians as its eastern boundary, the southern Carpathians or Transylvanian Alps as its southern edge, and the western Roumanian Carpathians or Bihor, etc., mountains on its western flank. Its mountainous frame and its hilly interior give it a very decidedly upland character, even if the Olt, the Maroş and the Szamoş, which drain it, have considerable systems of tributary valleys. Outside the bastion to the east Bukovina and Moldavia slope down to the great plain of eastern Europe, of which Bessarabia forms the flank west of the Dniestr. Behind the bastion to the west Timişoara stretches down to the Tisza, and forms the south-eastern flank of the middle Danubian plain. Outside the bastion on the south is Wallachia, sloping down towards the lower Danube, while beyond the considerable barrier formed by the lowest portion of the Danube and to the south-east, is the low plateau area of the Dobrogea.

[113] IN A PREVIOUS study we gave in some measure a picture of rural life in the eastern Carpathians near the border between Transylvania and Moldavia, where the mountains barely reach 1,900 m. (say 6,200 feet), and the highest land is often in great expanses of pasture with deep valleys cut by the rival drainage systems of the two sides, which are separated by a number of passes that may indent the watershed. In the eastern Carpathians Roumanians and Szeklers, respectively Uniate and Roman Catholic, live in adjacent villages, and the former, especially, send flocks and herds to the highland pastures.

121 THIS STUDY is intended to deal more especially with what is thought to be a typical area of rural Wallachia, having an almost entirely Roumanian population attached to the Orthodox Church and living under circumstances differing

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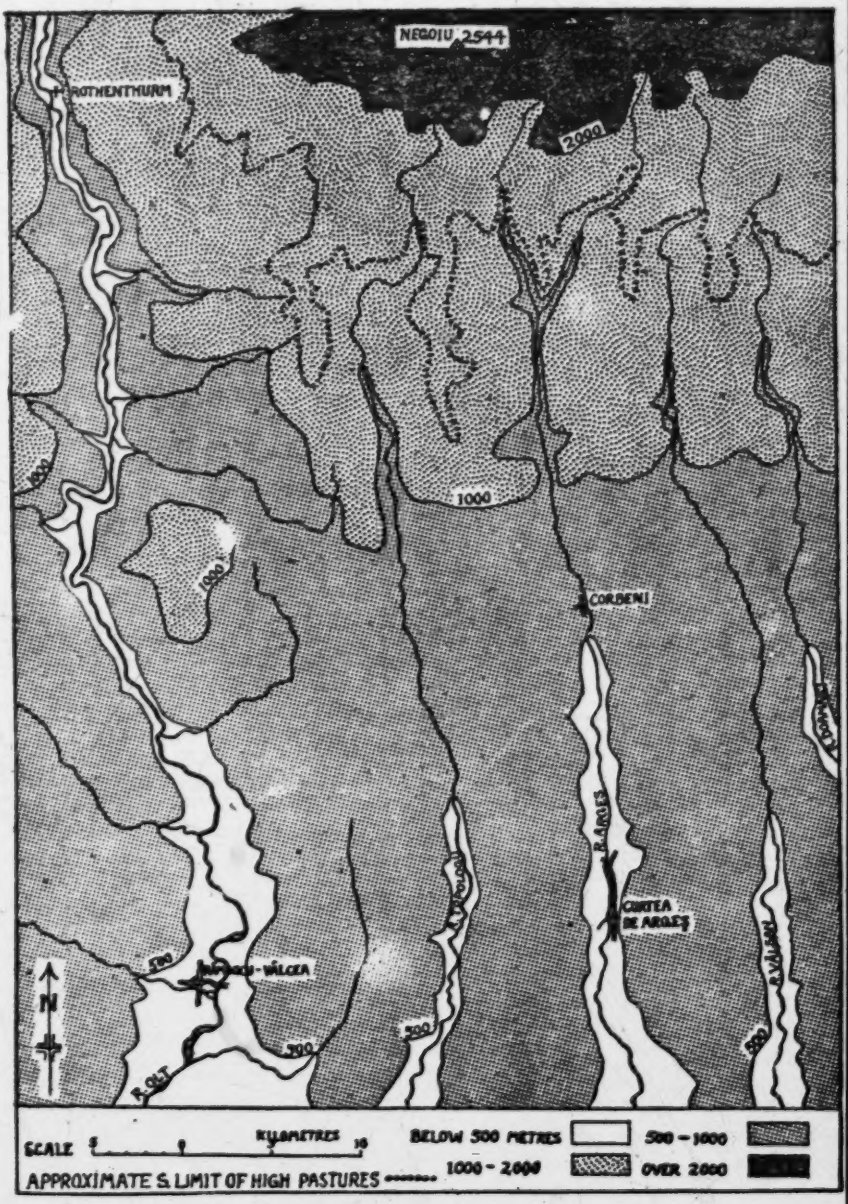

The Olt Valley and the Upper Argeș.

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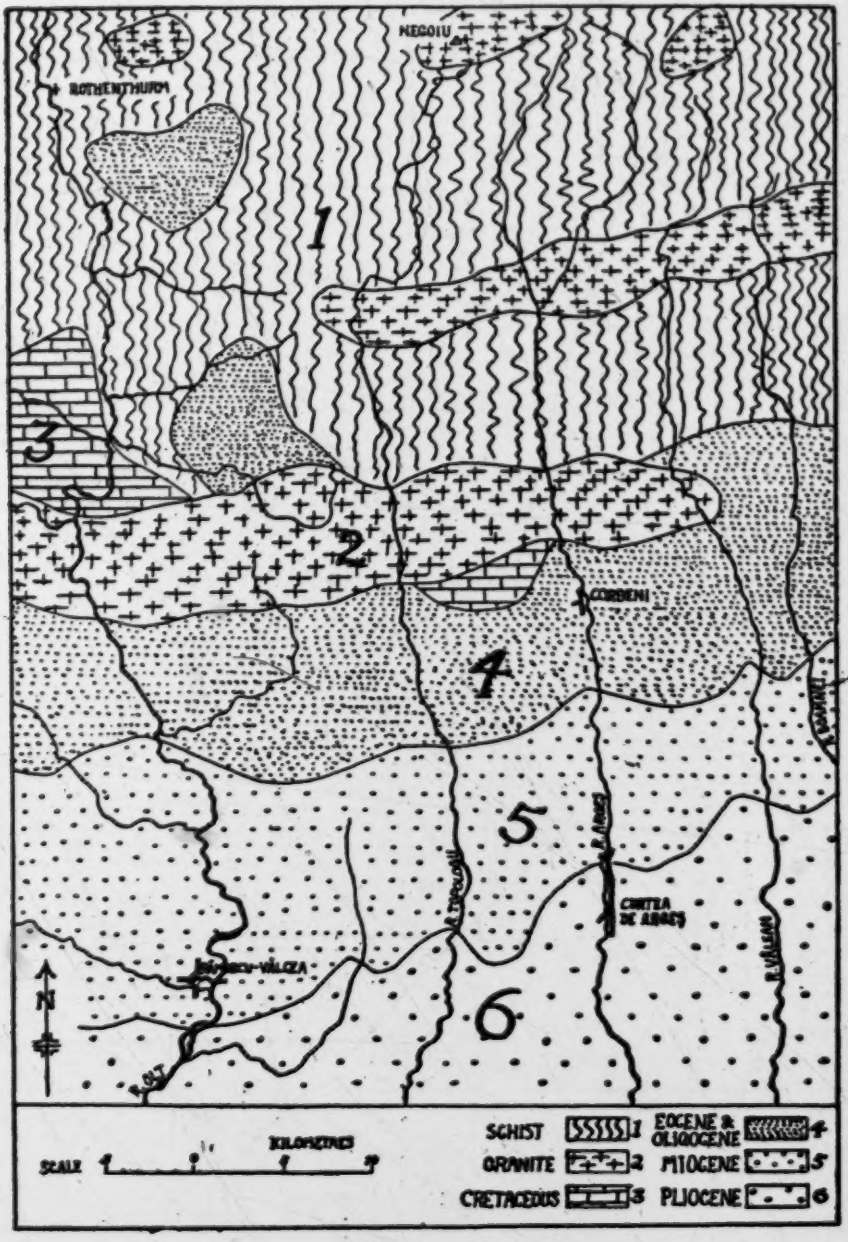

Geology of the Area shown in Physical Map.

121 considerably from those of the eastern Carpathians; this area is the district focusing upon Curtea de Argeş.

101 WALLACHIA has already been described as the land stretching
133 from the southern Carpathians or Transylvanian Alps to the Danube. The mountains themselves are largely of metamorphosed rock with flanking Miocene deposits; they are about 40 km. wide with the sharp main ridge (rising at Negoiu to 2,544 m. or 8,331 feet) parallel to the long flanks about 11 km. from the northern and 29 km. from the southern edge. Several rivers have worked their valleys out among the mountains in a direction parallel to the ridge and the edges.

133 THERE ARE huge accumulations of pebbly, often deltaic, outwash beyond the south flank of the mountains, the layers sloping southward and giving sunward dip-slopes separated by small northward-facing scarps, the woods of which contrast with the arable lands on the dip-slopes. This pebbly outwash is deeply dissected by southward-flowing consequent streams, some of which rise in it, while others, like the Argeş, penetrate the mountain wall, making a wild narrow gorge. In the deep valleys of the pebbly material houses shelter from the north winds. The Olt has cut right through the mountains and captured a subsequent river of the northern flank, and its way through the mountains is by a deep valley, which is wider in some sections that are more or less "subsequent" and narrower in others that are rather "consequent." At
133 about 20-25 km. southward from the mountain wall the
361 residual hills of loose material that stand out between the consequent valleys milden down; the amount of alluvium and the breadth of the river valleys increase and it becomes possible to bridge the rivers, so it is at about this distance from the mountains that have grown the towns of Ramnicu Valcea on the Olt and Curtea de Argeş on the Argeş. Ramnicu Valcea is at the last narrowing of the Olt before it begins to braid on a broad alluvial plain, and its site is not easily defensible. The Argeş has terraces near the stream on the eastern side at the bridge, and the river has already swung against this bank some 2 km. north of the bridge. This gives defensible positions as well as facilities for bridging, and helps to account for the historic, if somewhat localised, importance of the town of Curtea de Argeş, the focus of the region of which studies were made.

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Plan of Curtea de Argeş. Wooded areas shaded. Heights in metres.

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CURTEA DE ARGEŞ

133 361 REFERENCE has already been made to the bridging of the Olt and the Argeş about 20-25 km. from the mountain-edge and to the rise near these bridges of the towns of Ramnicu Valcea and Curtea de Argeş. It has also been explained that terraces on the left bank of the Argeş swing near the river to give an effective bridge-end site capable of defence. Curtea de Argeş is one of the oldest settlements in Muntenia.

[791] AT THE BRIDGE the river is over 420 m. above sea, and from its western end an old trackway, now a main road, follows approximately the 440 m. contour on what appears to be a terrace against which the river swings about 1½-2 km. north of the bridge. Here also gravel reaches, connected with the junction of a brook with the main stream, provide a ford; [778] and at this spot on the east side of the river there is the monastery of royal associations founded in 1510 and celebrated as a place of pilgrimage. Beyond this the road goes on up a tributary valley towards the east. The bridge and town however grew up not at this ford, but at a point farther south, where the north-south residual ridge bounding the Argeş valley on the east sends a spur almost to the actual river but just cut off by a seasonal tributary brook. The end of this spur shows two marked terraces, one just slightly above the river, the other some 12 m. above it and rising, as was said [3+] above, to about the 440 m. contour. On the end of the spur is a ruined Roman Catholic church, built for Marghita, wife of Prince Basarab. The Wallachian princes of these days appear to have had a habit of marrying Catholic women. One seems to see faint indications that the site of this church has been to a slight extent developed artificially. In 1390 this church served as a cathedral for Catholics in Wallachia, and the see lasted until 1602, by which time many Catholics had become Orthodox and the Catholic bishopric was removed to Dacau.

[491] REFERENCE has already been made to the north-south road on the terrace, no doubt a modernisation of an old trackway, with the town near the end of the spur and the bridge, and the monastery to the north. Near the end of the spur, and

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[Curtea De Argeş]

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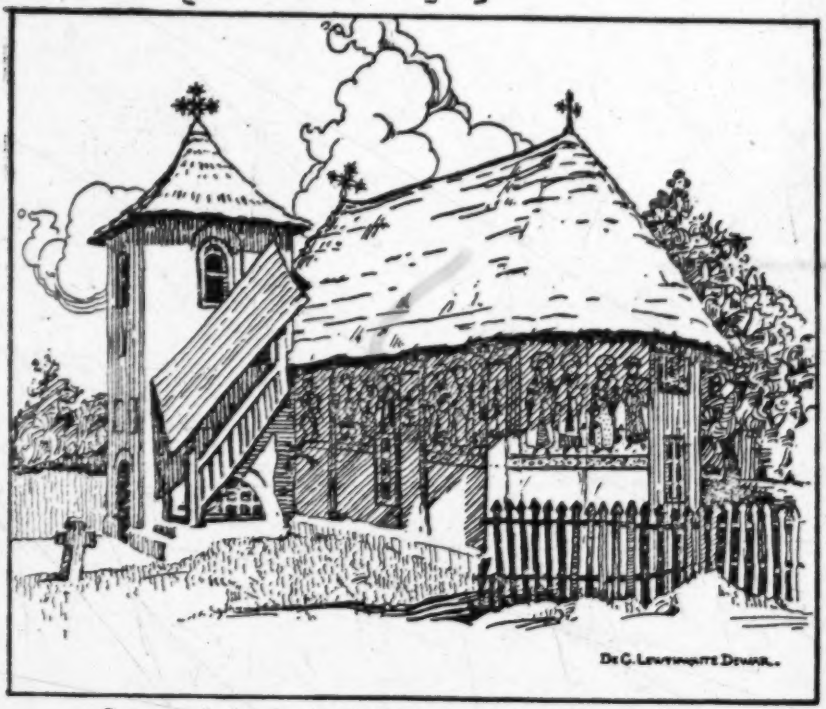

Cream-washed and painted church of St. Mary at Curtea de Argeş

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related to the brook already mentioned, is a spring of some value. Above this, on the terrace, is the nucleus of the town—an Orthodox church (1352) of exceptional dignity and beauty, the Biserica Domneasca, built in a fortified enclosure. This scheme suggests comparisons with such Saxon villages as Cristian, near Sibiu, and several others, though there the church was Catholic. The fortification at Curtea de Argeş is larger than those at such places at Cristian, but it is far from being equivalent to the fortification enclosing the primary nucleus of Sibiu, for that nucleus included church, market places, shops and residences. It seems to have been a widespread rule that where a whole town was not walled there should be at any rate a fortified refuge enclosing the church. In the Slavonic parts of the European plain there were, of old, burgwälle or earthwork refuges, in some cases one for each area of about 120-130 km., or, say, fifty British square miles. These burgwälle sometimes became the nuclei of towns, the Wawel at Krakow being perhaps the best known among many examples. On the Wawel, and in analogous places in many

361 towns, stands a church in a fortified enclosure, and the town
133 has been laid out beyond this. It is possible to infer that a similar process has worked itself out, but to a lesser degree, both in the Saxon villages of Transylvania and in such cases as that of Curtea de Argeş. Here the church-and-castle nucleus is as usual the focus of roads, the principal one of which runs along the terrace as already mentioned. Two others lead down towards the river, one on each side of the fortification, but not exactly to the bridge, the position of which is rather determined by gravel banks where the small seasonal brook referred to above joins the river. Some other roads or trackways branch off in a bunch just east of the nucleus and stretch up into hills of unconsolidated material, their woodland cover increasing with altitude and becoming practically continuous forest at about 600 m. altitude over sea. Where the woods are not continuous there is pasture up to which animals may be drawn every day in summer. One of these roads leads past a little old church of S. Mary and appears to be an old track leading obliquely up the hill and over into the next valley to the east. Along the beginning of this trackway are the homes of numerous craftsmen, especially potters, but we did not get evidence of a guild or zunft of potters. We are not here dealing with quite the same scheme of organisation as that of a trade in a street within a walled town. The main business part of the town has lain between the bridge end and the road on the terrace, 10-20 m. above the river, and the town has been physically constrained to spread along that road. The extension southwards has an interesting eighteenth century house overlooking a square set out quite recently. The extension northwards towards the monastery gives a ribbon of buildings mostly modern.

443 On the whole, one has the impression of a focus of peasant life with fairs and markets and opportunities of sale of craft products, especially pots, to country folk. There is evidence of considerable quite modern growth, and also apparently of growth one to two centuries ago, a growth which it is tempting to associate with agricultural development gathered around the spread of maize and potato, but proof is lacking.

361 Curtea de Argeş owes a great deal of its importance to its
771 religious and princely associations, and both the Biserica Domneasca and the monastery church are important here. The latter, near a ford, may well have more ancient associa-

[Curtea de Arges -- 25 Analyst]

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FARMING AROUND CURTEA DE ARGEŞ

AMY R. BURGESS

133 IN THE region of Curtea de Argeş the river flows in a valley of varying width, floored with fine sandy alluvium and bounded by somewhat rounded hills. Some traces of river terraces are discernible.

THE LAND of this region can be divided into four categories: (*a*) arable, (*b*) hay meadows, (*c*) forest, (*d*) high mountain pasture. The arable land is principally on the first terrace, but stretches both down the slope to the valley bottom and up the slope to the second terrace. The hay meadows are above the arable land, spreading upwards towards the [137] forest. The forests comprise 75 per cent of the total area, and consist mainly of timber trees, such as beech and pine, together with a considerable number of walnut trees. The high pastures are above the forest belt and may be as much as fifty kilometres away from the village centre of the commune to which they belong.

423 THE ARABLE land is owned by the peasants, holdings ranging from less than one hectare to fifty hectares, the majority being from two to five hectares. The smallness of the holding [428] is due partly to the laws of inheritance, by which the land is divided between the children on the death of the owner, and partly to the fact that the district is so hilly that only small areas are available for cultivation.

241 476 THE HAY meadows belong to the commune and are both worked and used collectively by the peasants, all necessary organization being in the hands of the mayor and committee.

471 [313] THE FORESTS are largely state-owned, although some portions belong to the commune, in which case the peasants are allowed to cut for their own personal use (house-building, implements, etc.), but not for profit.

[233] THE HIGH pastures belong to the commune; the peasants pay a small fee to the commune for their use (20 lei per head per season for sheep, rather more for cattle).

132 AN IMPORTANT climatic feature affecting agriculture is the shortness of the summer, late spring and early autumn frosts

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TRANSHUMANCE IN THE SOUTHERN CARPATHIANS

233 221 In the Southern Carpathians we have a region which still retains its pastoral activities, little disturbed by the social and economic forces which have invaded the pastoralists' domain elsewhere. Few Roumanian villages are without sheep, and in the summer great numbers are taken to the high pastures when these become free of snow. This seasonal migration, or transhumance, is an ancient feature of European life, and a study of its forms and functions in Roumania not only throws light on important aspects of peasant life, but provides valuable comparative material for the study of similar movements in regions like western Britain, where transhumance survives only in a modified way.

[291] Sheep are the pivot of rural economy in these Carpathian lands; the pastoral element pervades all aspects of peasant life—from the traditional costumes of woollen cloth trousers and sheepskin waistcoat to popular poetry and music. But the intimate contact with upland pastures thus ensured has been of deeper significance: it has enabled the Carpathian peoples to preserve their sense of unity when the lowlands were overrun by invaders, while the contacts maintained between summering groups have helped to preserve the Roumanian language and kept its dialectal variations within limits. In a very real sense, the Southern Carpathians are the heart of Roumania.

● 133 Physical conditions have, from very remote times, favoured the development and survival of pastoral life. The steepness of the forested valley slopes which isolate the upland core is in strong contrast to the gently undulating platforms which rise above the tree-line, at about 5,000 feet, and terminate in rugged glaciated *monadnocks* which may reach 8,000 feet or more (Negoiu, 2,544 m.). The prolonged erosion of Tertiary times which produced the upland platforms also provided the great masses of unconsolidated material—mostly coarse sands—which now form the extensive foothills stretching half way to the Danube over a width of some sixty miles. Curtea de Argeș is one of the settlements of this foothill belt,

dependent for the working out of its economy, as for its setting, upon the high Southern Carpathians.

While in some parts of Roumania all the sheep must be moved to distant highlands in summer, there are many regions which have sufficient local pasture to keep a certain proportion of stock through the year. This applies to the country around Curtea de Argeş; here the late Tertiary (Pliocene) deposits are provided with frequent terraces. The lower terraces are glacial and may be three in number; higher up the dip-slopes of the coarse sands have often been cleared of the bad forests which still cling to the scarps, while at all levels slips have occurred in the loose materials to produce small mesa-like areas, sparsely covered with grass, juniper and birch, accessible to nimble sheep and goats.* In general, however, such local pasturage is reserved for cows in milk, while young cattle and bullocks, if not required for the many activities of farming and forestry, are sent with the sheep to the high pastures.

We may best examine some of the features of this transhumance by following the sheep in their movements through the year in the valley of the Argeş and its background of high mountains, the Fagaras, extending eastwards from the valley of the Olt. The commune of Corbeni, some seventeen kilometres upstream, provides us with a few figures. Here is the first widening of the Argeş Valley, for the river has left the last range of the Carpathians (1,500 m.) through which it cuts one of the great gorges which characterize this zone, and it is here entering on its braided course through the Miocene and Pliocene deposits to the south. The proportion of forested land in the commune is high (75 per cent), and its 2,500 sheep can be maintained only by extensive transhumance. The summer pastures are from thirty to fifty kilometres distant, the stâne† extending from the forest's upper limit (1,500-1,600 m.) to the scarred rock faces of the high core at 2,000 m. Each commune has its stână, which takes its name from the mountain on which it is situated: it is the property of the commune, but there are certain payments to be made each year for the services of

*Goats tend to be kept only by the poorer peasants; they are naturally not encouraged by the Forestry authorities.

†Stână (singular). The word is applied as here to the summer pastures and also to the huts where the shepherds sleep and make the store the cheese. By extension it is sometimes used for the general economy of transhumant shepherding.

ECONOMICS

GEOGRAPHIC and ETHNOGRAPHIC NOTES.

131 Rumania has an area of 294,967 square kilometers, approximately larger than that of Italy, and owing to its circular form has proportionately to its surface a very short stretch of frontiers, only 2,669 Km.—which are mainly formed by natural features. It is situated between the 43-rd and 49-th degrees north latitude and 20° and 31° east longitude. The highlands of the Maramureş separate Rumania from Czechoslovakia, but there is no clearly defined frontier between Rumania and Poland. The river Dniester constitutes the frontier with Russia for a distance of some 700 Km. To the east Rumania is bounded by the Black Sea for a distance of 277 miles. It is separated from Bulgaria partly by an artificial frontier across the Dobrudja, and partly by the Danube for a distance of about 450 Km. The latter river also provides a partial boundary with Yugoslavia to the south, while to the west the frontier separating Rumania from Yugoslavia and Hungary is drawn through the plain of the river Theiss at about a distance of 30-40 Km. to the east of the latter. The country is divided into the following provinces:—

133 635 *Wallachia*, which is sub-divided by the river Olt into the district of Oltenia to the west and Muntenia to the east, the latter being separated from Moldavia by the river Sereth and its affluent, the Milkov. Oltenia is composed of a wide belt of hilly country bordered by the Danubian plain to the south, which, narrow at its western end, gradually broadens out to the east into the plain of the Baragan, considered to be the granary of Rumania and extending from the river Ialomitsa to the S reth. Wallachia is watered by numerous rivers, which with the exception of the Olt, the source of which is in Transylvania, all rise in the southern Carpathians and flow into the Danube, the largest of them being the Jiu, Argesh, and Ialomitsa.

The Rumanian bank of the Danube, owing to its extreme flatness, is subject to inundations and forms a fringe of marshes and swamps extending along the whole length of the river to a width of some 20 Km. in some places. The

10: Logio S-4 (no date) 1932 ED1 Rumania ED1

imposing range of the Southern Carpathians, otherwise known as the Transylvanian Alps, shuts off Wallachia on the north from Transylvania, the main means of communication between the two provinces being provided by the Vulcan, Red Tower, Predeal, and Buzau defiles.

Moldavia is divided in almost two halves by the river Sereth which rises in Bucovina and flows southwards until it joins the Danube, receiving in its onward course several tributaries, the most important of which are the Moldova, Suceava, Bistritsa, and Trotush, the valleys of which furnish means of access to Transylvania. Western Moldavia is a hilly region very similar in structure to the Transylvanian basin, while the region between the rivers Sereth and Pruth forms a country of vast rolling plains.

Bessarabia is separated from Moldavia by the river Pruth and is delimitated to the north-east by the river Dniester, which constitutes its frontier with Russia. It is a country of vast, sparsely wooded plains, and is renowned for its orchards and extensive vineyards. The southern portion has a steppe-like appearance, though intersected by numerous lakes. It is deficient both in wood and in spring water, and for a long time this deficiency proved an obstacle to its colonization. Bessarabia originally constituted part of Moldavia, with which it also forms a geographic unit. Its capital, Chişinau, or Kichineff, is a well-built city. It possesses numerous colleges, religious institutes and governmental buildings, which form the relics of the former Russian administration and evoke memories of its past magnificence. Owing to the stoppage of traffic with Odessa, complete stagnation prevails. The Rumanian authorities have avoided the construction of communications in Bessarabia, and Chişinau, though being the second largest town in the kingdom, with a population of 117,016, is practically isolated, for the existing railways laid out by the Russians to suit different requirements, are from the commercial point of view now utterly unpractical for actual necessities. As a result stagnation has set in, and this maintains among the population a regret for the past Russian régime.

The Dobrudja lies to the south of the Danube, and may be regarded as an extension, both geographically and ethnologi-

133 cally, of the Bulgarian plateau that projects northward to
635 the Danube delta. The northern part is covered by hills, gradually sloping southwards towards the vast wooded but waterless stretches of the Dely-Orman, part of which still lies in Bulgaria.

The Banat and the Crishana form parts of the Hungarian plain and possess the same climatic and agricultural features as the latter. The eastern part of the Banat is mountainous, forming geologically an extension of Transylvania and of the western spurs of the southern Carpathians, while the Crishana is separated from Transylvania on the east by the mountainous mass of the Bihor mountains, reaching to an altitude of 1,800 meters.

Transylvania forms a circular tableland whose mean altitude is from 350 to 600 meters, and forms the essential nucleus of Rumania, both geographically and ethnically. It is encircled to the north, east, and south by the Carpathians, which occasionally reach to an altitude of 2,000 meters in the
[132] north and 2,544 meters in the southern section. Owing to an average annual rainfall of about 35 inches, numerous streams take their rise and drain the region, breaching the mountain rim and thus forming the main ways of egress. The Somesh, Muresh, and Timish, the former two affluents of the Theiss, the latter of the Danube, connect Transylvania with the Hungarian plain and with the Banat, while to the south the river Olt flows through the Red Tower pass to join the Danube and offers the main and easiest way of access into Rumania. The whole region consists of an undulating upland cut up by ranges of hills into valleys, some of which are fairly extensive and fertile, owing to the frequency of
[31] alluvial deposits. The mountains are thickly wooded, about a third of the total area (32.19%) being under forest, and give rise to numerous streams, the presence of which explains the abundance of pasture land and meadows and accounts for the thriving live-stock rearing industry which forms the main source of the wealth of the province. The highlands of the Maramures, to the north, form part of Transylvania, and are separated from it by the river Somesh.

Bucovina forms a geographic unit with Moldavia and used to form part of that principality prior to its occupation by the

GEOGRAPHIC AND ETHNOGRAPHIC NOTES

Austrians in 1775. Bucovina, in spite of its exiguousness in arable land—about one fourth of its surface being devoted to a variety of agricultural crops and orchards—is one of the most advanced agricultural regions of Rumania, maintaining in certain parts of the valleys of the Pruth and Sereth as dense a population as 300 inhabitants per square kilometre. Its forests are better preserved than those of the other provinces of the kingdom, thanks to the careful system of administration the Austrians had initiated. They cover 35% of the region and form the main source from which timber is obtained in Rumania, the river Sereth being used largely for floating down the logs to the Danubian port of Galatz, whence they are exported. When the Austrians annexed Bucovina in 1775 its population was only 72,000. Thanks to their excellent administration and their efforts to develop the country, its population had surpassed 800,000 when it was reunited to Rumania; the increase was due partly, however, to the Austrian attempt at denationalizing the country by settling Ruthenian immigrants. Cernauţi, better known as Czernowitz, is a modern town, beautifully planned and with all the amenities of a western city. The spirit of its inhabitants is distinctly occidental and reminds one of the mentality of Vienna, the more so, since they have distinct leanings towards Socialism owing to the preponderance of German culture. The town used to be an important centre of traffic between Galicia and Russia, but owing to the loss of its hinterland it seems as though struck with a sudden blight while in full prosperity. It has a population of 111,147, and constitutes the third largest town of Rumania.

Table showing population and area of provinces according to census of 1930.

	Population.	Area (sq. km.)
Wallachia	5,542,467	76,583.
Moldavia	2,413,123	38,058.
Bessarabia	2,865,506	44,422.
Bucovina	845,903	10,442.
Dobrudja	811,332	23,262.
Transylvania	3,217,149	
Maramureş and Crishana	1,387,675	102,200.
Banat	942,072	
Total population	18,025,237	Area .. 294,967.

12: Kormos S-4, 5 (no date) 1944
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CHAPTER II

THE COUNTRY AND THE PEOPLE

/31/ The Kingdom of Greater Rumania which emerged
/61/ after the Peace Settlement of 1919 covered an area of about 118,000 square miles, which is more than Great Britain and Northern Ireland, and had a population of about 15,500,000. Greater Rumania comprised the Old Kingdom (Wallachia, Moldavia and the Northern Dobrudja) and the New Territories, namely the Eastern Banat, the Crisana, Maramures, Transylvania, the Bukovina, Bessarabia and the Southern Dobrudja.[1] In relation to the position before 1914 both the territory and population of Rumania had been doubled. Still more important, the Kingdom was transformed from a national State into a multi-national State.[2]

/133 The chief geographical features of Greater Rumania were the Carpathian Mountains, which sur-

[1] The Southern Dobrudja was Bulgarian up to the end of the Second Balkan War when it was ceded to Rumania; it was returned to Bulgaria by the Central Powers during the Great War, re-ceded to Rumania in 1919 and ceded again to Bulgaria in 1940.

/162 [2] The population of the Old Kingdom in 1915 was about 7,625,000. The population of Greater Rumania in 1920 was 15,541,000 and had risen by 1940 to over 20,000,000 (an average yearly increase of about 233,000). The most numerous of the minorities were the Hungarians and Szekelys of Transylvania and the western provinces; the Jews, living all over Rumania; the Germans, living in the Banat, Transylvania and Bessarabia; Ukrainians and Russians in the Bukovina and Bessarabia; Bulgarians in the Dobrudja, Bessarabia and the Banat; Turks, Tatars, Gypsies, Serbs, Poles, Armenians, Greeks, etc.

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12: Kormos S-4, 5 (no date) 1944
ED1 Rumania ED1

round the highland of Transylvania in the north, /33
east and south; the rolling plains of Wallachia; the Danube, which still is the southern frontier and main line of communication; and the slopes and steppes of Moldavia and Bessarabia.

The massive Carpathians are formed by two mountain ranges: the Eastern Carpathians which, rising west of the Pruth, extend southwards to the region of Brasov; and the Southern Carpathians, with high peaks of over 7,500 ft., which stretch westward and then turn to the south, where they reach the Danube. South of the great bend, formed by the two chains of mountains, lies the famous oil district of Campina and Ploesti, one of the chief economic assets of Rumania. The beautiful southern and eastern slopes of the Carpathians flatten out into the fertile plains of Wallachia and Moldavia, the latter merging in the east with the Bessarabian plateau, and in the north with the valleys and forests of the Bukovina. The Dobrudja, lying east of the Danube, as it turns northward, adds considerably to Rumania's share of the Black Sea coast. North and west of Transylvania lie the mountainous province of Maramures and the lowlands of the Crisana, which, geographically, belong to the Hungarian plain. The south-western tip of Greater Rumania was formed by the Banat, partitioned after the Great War between Yugoslavia and Rumania.

In Wallachia and Moldavia there is much which /33
is purely Balkan. There are the small villages with 361
muddy streets and little one-storied cottages of sun-dried brick, painted white and blue, some with wooden gables gaily decorated. On the great, rolling

12: Kormos S-4, 5 (no date) 1944
ED1 Rumania ED1

133 plains an endless sea of ripening wheat and maize
361 dips and rises in the summer breeze.

In the Carpathian valleys and in Transylvania dark forests alternate with fertile, gently rising slopes, irrigated by swift rivers which descend from the high mountains. Old castles and mansions of Hungarian nobles still guard the highways which pass through Rumanian, Hungarian and German villages and the small 'Saxon' towns, some of which have still preserved the atmosphere of mediaeval German townships.

In the Bukovina the civilizing influence of the Austrians is still visible. This small province, with its factories and prosperous farms, is one of the crossroads where east and west meet. In Bessarabia Russian and Ukrainian influences are very strong. The churches and cottages, the peasants' carts and dresses recall the Ukraine east of the Dniester. The Dobrudja, with its undulating uplands and its long, sandy Black Sea shore, offers good grazing for many great flocks of sheep which are driven there in the autumn to escape from the icy winter in the Carpathians. The province is only sparsely populated and has a definitely Balkan character. Fezzes and turbans are still common in the streets of its little towns. The plains west of Transylvania differ little in their aspect from the great Hungarian plains, but here too there is a great diversity of peoples and cultures, all adding to the colourful and often confusing picture of Rumania as it was between the two wars.

162 THE POPULATION. The acquisition of the New Territories after the Great War brought many non-

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ED1 Rumania ED1

[oltenia]

Kingdom is Wallachia, which is formed by Oltenia and Muntenia.

OLTENIA. Oltenia is the western part of the principality of Wallachia. Its boundaries are, in the west and north the Carpathians, in the east the River Olt, and in the south the Danube. The province covers an area of about 9,640 square miles and has a population of about 1,900,000. The soil of the sub-Carpathian hills consists of sand and clay and gravel and is well watered by numerous rivulets. Here are some densely populated valleys, bordered by rich forests and grazing grounds. Farther south and extending to the Danube lies the fertile plain composed of the rich 'yellow earth'. Its character is similar to that of the lowlands of Muntenia, but it lies on a higher level and also has a higher rainfall.

The richest district of this fertile province is the *judet*[1] of Dolj in the south-western corner of Oltenia. From here, and the similarly fertile *judets* of Mehedinti and Romanati, also on the northern bank of the Danube, high-quality maize and wheat have been exported for many years. From the hilly country farther north fruit is the chief export. In the mountainous districts forestry provides the main occupation for the local inhabitants. There is much sheep-breeding, for the grassy slopes provide good grazing.

Apart from the Danube the two most important rivers of Oltenia are the Jiu and the Olt; the latter rises in Transylvania and enters Oltenia through the Red Tower Pass. Oltenia is not rich in mineral resources. There is, however, oil at Govora, west of

[1] Administrative unit.

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ED1 Rumania ED1

[Oltenia.]

[Muntenia]

The Danubian ports of Calafat and Corabia handle wheat exports and also have some valuable industries.

MUNTENIA. To the east of the River Olt extends Muntenia, the other province of Wallachia. It covers an area of about 20,600 square miles and has a population of about 4,500,000. The southern and eastern boundaries of the province are formed by the Danube, the northern frontier by the Carpathians. The land surface and climate of Muntenia are similar to those of Oltenia, but the hilly region south of the Carpathians is narrower. The fertile steppes, Baragan, Burnas, Gavan and Burdeas, are situated on the northern banks of the Danube which floods the adjoining districts and forms many lakes and marshes. The highest peaks of the Carpathians in Muntenia are the Negoi and the Moldovan, both over 7,500 ft. The most important of the many rivers descending from the high mountains are the Dambovita, Jalomita, Arges and Buzau, all of which eventually flow into the Danube. The endless maize and wheat fields of Muntenia are covered in summer with heavy crops and on the steppes great flocks of sheep find their food. In spite of very dry summers and icy winters like those of Russia this region is one of the richest of Rumania and the whole of Europe.

Muntenia differs from all Rumanian provinces in that, in addition to stock breeding, the raising of high-quality crops, fishery and forestry, it possesses a source of wealth which is not found in such abundance in any other part of Europe, the oil fields of Campina and Ploesti. There the hilly, wooded countryside suddenly changes into a modern in-

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ED1 Rumania ED1
[Bucarest]
[The Dobrudja]

Bucarest is also the chief railway centre of Rumania.

Giurgiu on the Danube, south of Bucarest and the terminus of one of the oil pipe-lines from Ploesti, is one of the main Rumanian wheat and oil ports. Another Danubian port, where great quantities of wheat are handled, is Braila with a population of about 70,000.

There are no natural barriers to communications in Muntenia. In the south the chief flow of traffic is carried by the Danube. Rail and road communications from Transylvania pass through the Predeal and a railway line leads over the Danube to the Dobrudja.

THE DOBRUDJA (Dobrogea[R]).[1] Up till 1878 the whole of the Dobrudja belonged to Bulgaria. Ever since, this province has been a bone of contention between Rumania and Bulgaria. The northern part of the Dobrudja was awarded to Rumania in 1878 to compensate her for the loss of Southern Bessarabia to Russia. The southern part of the province was ceded by Bulgaria after her defeat at the hands of her neighbours in the Second Balkan War in 1913. This region was returned to Bulgaria in 1940.

Geographically the Dobrudja is the north-eastern corner of the Balkan Peninsula. Its boundaries are in the north and west the Danube and in the east the Black Sea. There are three distinct regions: the delta of the Danube, the forests of Babadag, and farther south the steppe, which is the most fertile

[1] The letter R, H or G following a geographical term denotes a Rumanian, Hungarian or German name, respectively.

[The Dobrudja]

131 part of the Dobrudja. The delta of the Danube is
133 formed by the three arms Chilia, Sulina and St George. It includes an area of about 1,000 square miles, in which water and land, marshes, lakes and
[503] islands feed an almost tropical vegetation. The chief communications through the delta are provided by the Sulina canal and by causeways.

311 The steppes of the Southern Dobrudja yield good
135 crops of wheat and maize, and the pastures maintain great herds of sheep. Mineral resources are confined to some unworked coal deposits, valuable copper near Altantepe, and sulphur.

131 The Dobrudja is about 9,300 square miles in all:
161 of this some 2,960 square miles were returned to Bulgaria in 1940. The population of the province as a whole is about 850,000. Its main value to the contesting States lies in the Black Sea stretch of
504 coast. The port of Constanza, the greatest and most
361 important on the western shores of the Black Sea, has modern harbour works built at the beginning of this century and covering an area of 60 hectares. It was through Constanza that Rumanian exports used to pass to France and Great Britain. The docks of Constanza are about 30 ft. deep and can, therefore, be used by large, sea-going ships. The harbour facilities include storage buildings for wheat and oil-tanks with a capacity for over 200,000 cubic metres of fuel, which are fed by the pipe-lines coming from Ploesti. Oil can moreover be pumped straight from the pipe-lines simultaneously into four tankers. Another great advantage is that the port is
361 completely ice-free all the winter. Constanza is the administrative centre of the Dobrudja and also a well-known seaside resort. Rail communications

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ED1 Rumania ED1

[The Dobrudja]

[Moldavia]

with the rest of Rumania are provided by the line Constanza-Cernavoda-Bucarest.

MOLDAVIA (Moldova[R]). The second of the two original Rumanian principalities is only half as big as Wallachia and its population is about half. Moldavia covers an area of about 15,280 square miles, and is inhabited by about 2,500,000 Rumanians, Jews, Hungarians, Slavs and Germans.

Owing to its geographical position Moldavia was more exposed to Polish, Russian and also Hungarian influence than Wallachia. After the death of the *voivode* Stephen the Great in 1504, the country became part of the Turkish dominions. From then onwards Moldavia shared the fate of Wallachia. Russian influence, however, naturally made itself felt in greater intensity in Moldavia. The independence of the principality was restored under John Cuza who eventually became the first ruler of the United Principalities.

The western boundaries of Moldavia are formed by the Carpathians. In the south the province borders on Muntenia and in the north on the Bukovina, which originally was part of Moldavia. The eastern frontier is formed by the River Pruth. The western part of Moldavia consists of the slopes of the Carpathian Mountains and the hill region below. Farther east the country flattens out into the plains which are bordered by the valley of the Pruth. The most fertile districts lie on the western bank of the Pruth and in the eastern corner of the province. The hills, which reach heights of 1,800 ft., are wooded. But there is much fertile soil which produces wheat and maize. There are also vineyards

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ED1 Rumania ED1

[Moldavia]

and good pasture. The Sereth, which waters this region and runs parallel to the Pruth, flows into the Danube below Galati.

On the eastern slopes of the Carpathians there are large deposits of oil which have not yet been fully exploited. In the *comitat* Bacau, also in the mountain region of Moldavia, there are some valuable coal and salt mines. The salt mines of Targu-Ocna are the most important in the whole of Rumania.

The majority of the people of Moldavia are employed on the land. They grow wheat, maize and sugar-beet and tend the vines. Recently, successful experiments have been made with the growing of industrial crops. Timber felling provides another source of income, especially at Targu-Neamt, Piatra-Neamt and Focsani. There are important refineries at Moinesti and Solont, sugar factories at Roman and Ripiceni, and large textile works at Buhusi.

The capital and economic centre of Moldavia is the town of Jasi, on the western bank of the Pruth. Its population numbers about 80,000, more than half of them Jews. Jasi, lying on a number of vine-growing hills overlooking the valley of the Pruth, is an old commercial centre, which used to be visited in the middle ages by Genoese, Venetian and Greek merchants. In Jasi, with its wide streets flanked by long rows of one-storied houses, there is the oldest Rumanian University, founded by John Cuza, a famous library containing over 160,000 books, and many other cultural institutions. Jasi has a number of iron and steel works, several clothing factories and is the chief marketing centre for cattle and wine in Moldavia.

[The Banat]

The north-western part of the province is the continuation of the Hungarian plain and is very fertile. To the east and south there are high mountains with rich forests and iron and coal deposits. The mountains of the Banat are forced by the Danube in the area between Bazias and Orsova, cutting a deep narrow valley which, in the Kazan Pass, is only about a hundred yards wide. This is where the Roman emperor Trajan built the second of his bridges over the Lower Danube. This is also one of the most picturesque regions of the Banat and the whole of Rumania.

The Banat has been a strategic and economic outpost of various States and empires. Throughout the times of known history this province was a favourite region for colonization. Romans, Turks, Hungarians and Austrians sought to strengthen the frontiers of their dominions by settling the Banat with peoples on whose loyalty, military and economic abilities they could rely in case of war. In consequence peoples of all races were transplanted to and took root in the Banat. In Roman times the province was fortified in order to protect the settlers who were brought here from all over the empire against the Dacians of Transylvania. During the many Turkish wars the Banat was an important defensive position upon which the Hungarians based their strategy. For over a century and a half, from 1552 to 1718, the Banat was under Turkish rule and went through a period of decay.

Under the Austrian military administration, which lasted up to 1779, the Banat experienced great prosperity. German settlers from the Rhineland and French-speaking peasants from Lorraine were brought to the Banat by the Empress Maria

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EDJ Rumania EDI

[The Crisana]

in the west and Czechoslovakia in the north. The inhabitants of the Crisana are Rumanians, Hungarians, Jews, Germans and some Slavs. Taken as a whole the province contains a slight Rumanian majority, but there is in the immediate frontier region a fairly homogeneous Hungarian population, which forms a local majority.

The western part of the Crisana has the same features as the lowlands of Hungary. The types of agriculture also closely resemble those of the rest of the country on both banks of the Tisza[H] (Theiss[G]). There are wide, flat fields of maize and wheat interspersed with pastures, grazed by horses and longhorn cattle. To the east the country rises and forms a chain of hills which produce good fruit and wine. Beyond are the mountains of Bihor (Bihar[H]) which form the western wall of Transylvania. These mountains are rich in coal, gold, copper, bauxite, asphalt and marble. Consequently this region maintains numerous industrial enterprises. Apart from its mineral resources and good wheat and maize the Crisana is also well known for its horses, cattle, pigs and sheep.

The capital of the Crisana is Oradea-Mare (Nagyvarad[H], Grosswardein[G]) in the valley of the Cris (Körös[H], Kreisch[G]). Its population of about 95,000 consists of Hungarians, Rumanians, Jews, Germans and others. Oradea is the junction for five railway lines and commands all the main communications leading from the Hungarian plain to Transylvania. The town is also the seat of many industries and the chief market for the agricultural produce of the province. Arad, on the northern bank of the Mures (Maros[H]), is inhabited by 65,000 people,

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ED1 Rumania ED1

[Transylvania]

563 leges. In 1919 they accepted the union of Transylvania with the Old Kingdom. In the inter-war period the Germans in Rumania enjoyed a far better treatment than any other minority, and in Transylvania they were by far the most prosperous community. Nevertheless, the pan-German policy of National-Socialism found many supporters in their ranks.

131 648 [161] *Vienna Award.* Before the Vienna Award of 1940 Transylvania covered an area of 24,600 square miles and had a population of over 3,250,000, including 200,000 Jews. The decision of the German and Italian Foreign Ministers in Vienna split Transylvania in two, a measure never before carried out during the eventful history of the principality and certainly harmful and unjust to all the parties concerned. There is no doubt that this 'solution', which has only complicated the Transylvanian question and made its real solution more difficult, was made deliberately in order to make both Hungary and Rumania more dependent on Germany's support.

133 *Geography and Products.* The Transylvanian highlands are surrounded on three sides by the high mountain chains of the Carpathians. In the south-west the border is formed by the 'Western Mountains' (Muntii Apuseni), and in the north-west by the hills which eventually merge into the Hungarian plain. The Rivers Mures, Somes and Tarnava divide the highland in three distinct parts, the steppe, the hills and the forests. Parallel with the outer ring of the Eastern Carpathians there runs a belt of volcanic mountains with many small valleys. In the south-east there is the fertile and hilly district of Trei-

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ED1 Rumania ED1

[Transylvania]

Scaune (Haromszek[H]) which also possesses numerous industrial enterprises. Most of the rivers of Transylvania rise in the Eastern Carpathians and flow to the west and south. The Mures, flowing from east to west winds its way between the Carpathians and the 'Western Mountains' near Alba Julia (Gyulafehervar[H], Karlsburg[G]) and descends into the lowlands farther west. The Somes (Szamos[H]) reaches the plains north-west of the Transylvanian highland and eventually flows into the Tisza. Communications with Muntenia and Oltenia go over the mountain passes of Predeal, Bran and the 'Red Tower', with Moldavia over those of Buzau, Ghimes and Bicaz, and with the Bukovina over the Rodna Pass.

The climate of Transylvania is not as favourable for the raising of crops as that of Muntenia and the Banat. In the valleys, however, maize, wheat and rye are grown with some success. Stock-breeding is more important than agriculture. But Transylvania is very rich in mineral resources. Apart from coal, gold, copper, salt, bauxite and iron Transylvania possesses the greatest reserves of natural gas in the whole of Europe. The chemically pure methane which is used by many factories for power, as well as for cooking and lighting by many householders, could supply the whole of Transylvania for over a hundred years and make the consumption of coal unnecessary.

The capital of Transylvania is Cluj (Kolozsvar[H], Klausenburg[G]), with a population of over 105,000, consisting of Hungarians, Germans, Rumanians and Jews. The town is an important rail and road junction and the cultural centre of all the three

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[The Bukovina]

[Bessarabia]

small deposits of coal, gold and lead, but the industry of the province is well developed.

The capital of the Bukovina is Czernowitz (Cernauti[R]) with over 100,000 inhabitants. The town is situated on a high hill near the Pruth and is a great commercial centre. Here branches of the Austrian banks and some big Viennese businesses remained. The population of Czernowitz, like that of the rest of the province, is very mixed. Economically important as a junction of several trade-routes, Czernowitz has also become a great industrial town during the last fifty years.

In June 1940 the Northern Bukovina, including Czernowitz, altogether about 2,260 square miles, was ceded by Rumania to the U.S.S.R. Thereby over 550,000 people, mostly Ukrainians and many Jews, became Soviet citizens.

BESSARABIA. For over twenty years the province of Bessarabia was the eastern frontier region of Greater Rumania. It covers an area of 17,760 square miles and has a population of 3,000,000[1]. Bessarabia is surrounded by natural frontiers: in the north and east by the River Dniester, in the south by the Black Sea and the Danube, and in the west by the Pruth.

The north of Bessarabia is formed by a highland about 1,000 ft. high, consisting of fertile arable land which belongs to the 'black-earth' region of the Ukraine. The central area is hilly country, divided

[1] To which were added 120,000 Polish and Ukrainian villagers transplanted from Eastern Poland by the Soviet authorities shortly before their retreat before the German attack in 1941.

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[Bessarabia]

by the valleys through which flow the tributaries of the Pruth and Dniester. In the south, beginning near Besarabeasca, extends the Budjak steppe which merges into the sandy soils, salt marshes and lagoons of the delta of the Danube and of the Black Sea coast. The climate of Bessarabia is the same as that of the regions east of the Dniester. The summers are very hot and dry, the winters very cold with icy winds and great snowfalls. Nevertheless, crops grow well in Bessarabia and 61% of the whole area is arable land. The chief products are maize, wheat, tobacco and wine and lately also soya beans. There are few factories and the only source of income for the people, apart from agriculture, is the fishing industry in the south.

The capital of Bessarabia is Kishineff (Chisinau[R]) with a population of over 200,000 (1935). Here are concentrated such industrial enterprises as the province possesses, the most important being flour mills, leather factories and other secondary industries connected with agriculture.

The first colonization of Bessarabia was carried out by the Romans who succeeded in occupying this territory only for a short time. During the great period of migration (seventh to tenth centuries), the province was invaded by a host of tribes. Bessarabia was first occupied by Rumanians in the early fourteenth century and incorporated in Moldavia in 1367. A century and a half later Southern Bessarabia fell to Turkey, but several merchant-colonies were still administered by Genoese and Venetian traders on the Danube delta and the Black Sea coast. In the following centuries Bessarabia was often a battleground for Russian and Turkish armies, who alter-

241 peasant views with suspicion and often hostility all attempts at improvements in traditional [479] methods. Even the co-operative societies have made less progress than in other Danubian countries. There is need for considerable capital expenditure in grouping small farms into larger units, in providing better buildings, more implements and fertilisers. There is need for diversification of production—more fodder crops and more animal husbandry. Above all, there is need for development in industry and commerce to provide work for the surplus agricultural population.

2. Natural Conditions and Regions

132 The climate is of the extreme Continental type, with long hot summers and severe winters. Precipitation is largely concentrated in winter and early summer. During the greater part of the growing and ripening season rains are light, and from time to time serious droughts occur which may ruin the grain crops.

●133 The agricultural regions correspond to the
311 natural divisions into plain and hill country—the Danube plain and Bessarabia which comprise the greater part of the territory and produce the bulk of the crops, and the hilly and mountainous land of Transylvania and the Bucovina.

The plain is well-suited for agriculture, the soil over much of it being of the fertile *chernozem* or [134] black-earth type, but the backward methods of farming and the light rainfall keep yields per acre low.

This region is not equally backward in all parts. The Rumanian Banat at the western end of the country, and formerly part of Hungary, is more [162] prosperous and progressive. The population is not purely Rumanian but includes Swabians and Saxons, descendants of the German stock systematically settled there on medium-sized peasant holdings in the eighteenth century after the cession of the territory to Austria by the Turks. Methods and yields, by Rumanian standards, are good. [231] The livestock density is higher than the average and the area produces a substantial surplus of pigs. Rural overcrowding is not as marked as elsewhere.

241 Conditions of life and methods of farming are
133 considerably worse in the plain land of the Old Kingdom. Agriculture here is as primitive as in any part of Eastern Europe, depending on an unbroken alternation of wheat and maize cultivation with little subsidiary production. Some wheat is marketed, but the maize is grown largely [311] for consumption on the farms. So little land is available per head of population that the farm population and working animals (which eat the maize stalks) can be fed only by devoting an excessive acreage to maize.

Bessarabia makes up the remainder of the plain land; conditions of settlement and farming methods are much the same as in the Old Kingdom, but the density of population is lower and there are substantial grain exports.

Given normal yields, every district of the plain area is at least self-sufficient in foodstuffs; indeed parts of it regularly produce large grain surpluses. Transitional areas between the Danube Valley and the Transylvanian plateau, such as the Carpatho-Moldavia and Carpatho-Muntenia areas, may,

[6c]

however, be slightly deficient in grain, especially in poor years.

The hilly land of Transylvania and the Bucovina differs markedly from the plain. There is proportionately less arable and much more meadow, grazing and forest land. The soil is poor. Methods are not as primitive as in the plain land of the Old Kingdom, but over-crowding is more serious and output per head is consequently lower. Parts of this region are slightly deficient in grain. Though the level of food consumption is low, the dietary is more varied than elsewhere in the country, less maize and more meat and dairy produce being eaten.

3. Crops

Of the total area of pre-war Rumania, of nearly 30 million hectares (110,000 sq. miles) and twice the area of England and Wales, about 13 million hectares, or 45 per cent. was arable. Permanent meadow, pasture and grazing occupied 14 per cent., while tree and bush crops accounted for a further 2 per cent. The remaining land was non-agricultural, forest and waste land.

A very high proportion of the arable—over 80 per cent.—was used for grain growing, principally maize, wheat and barley. Owing to low rainfall, use of poor seed and lack of fertilisers, yields were at a low level and fluctuated widely from year to year.

Out of an average grain production of 11 million tons, 6 millions went into domestic human consumption and 1½ million were exported, the remainder going to fodder, seed and waste. Grain exports have always figured largely in the country's foreign trade. During the twenty years 1920 to 1939 they only once fell below a million tons, and in some years exceeded three million tons. In value, during the decade before the war, they formed, after petroleum products, the main item in exports.

No other category of crops compares with grain. Sown fodder crops took barely 5 per cent. of the arable, all other crops, including potatoes, fibres, oilseeds, tobacco and sugar beet, about 8 per cent. Peas, beans and oilseeds were grown in sufficient quantities to provide surpluses for export. Germany established two companies—Solagra in 1934 and Soya A.G. in 1940—which invested large sums in promoting oilseed cultivation. The area under sunflower was raised only slightly, but that under soya rose from nil in 1933 to 103,000 ha. (254,000 acres) in 1939, but the greater part of both crops was located in Bessarabia which Rumania lost to the U.S.S.R. in 1940 (see below).

Production of potatoes, vegetables and sugar beet was just sufficient for domestic consumption, but the tobacco crop did not quite meet requirements. Tobacco production had fallen from 20,000 tons in the late nineteen-twenties to 12,000 tons in the years just prior to the war.

Fruit production was undeveloped and there was little organised marketing and processing. Plums were the main crop, but three-quarters of the output was used for making brandy. Apples and other kinds of fruit, and walnuts, were produced in fair quantities, but exports were insignificant, and, owing to low quality and the lack of standardisation, there were no prospects of development.

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cleared without very considerable development. It is probable that not more than about 50 per cent. of the above capacity could be worked. Grain is loaded by land and floating elevators.

[502]

The ports of Brăila and Galați are ice-bound during some winters, ice occurring to a sufficient extent to prevent navigation from the Black Sea between January and mid-March in about 3 years in 10.

D. INLAND WATERWAYS

I. General

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In 1937 navigable waterways totalled 2,540 km (1,766 miles) and were divided as follows :—

	Km.	*Miles*
Danube	1,075	668
Danube tributaries	395	246
Dniester	740	460
Prut	410	255
Mureș	185	115
Bega Canal	35	22

The rivers Dniester, Prut and Mureș have not been adequately regulated for regular traffic, but are used for local traffic and for timber floating.

II. The Danube

1. Traffic

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The Danube, Rumania's main traffic artery, carried about 60 per cent. of all import tonnage and some 15 per cent. of all exports in the years immediately before the war. Traffic is of two distinct types, first, the traffic in sea-going vessels with an average size of 2,000-2,500 tons proceeding as far as Galați and Brăila via the Sulina mouth, and second, on the river proper, on the Danube above Galați.

The sea-going traffic passing through the Sulina mouth in the years just before the war consisted of about 1·2—1·4 million tons a year of exports from Rumania or other riparian states. By far the most important items were grain and timber. About half the vessels entering the Danube from the sea appear to have been in ballast, the remainder bringing in some 900,000-950,000 tons of imports mainly for Rumania.

Inland-water traffic on the Rumanian sector of the Danube in 1938 (the latest year for which information for all kinds of traffic is available) amounted to 3 million tons. 1·6 million tons consisted of upstream traffic from Rumania to other riparian states, 0·24 million tons of downstream traffic to Rumania, about 1 million tons of Rumanian internal traffic, and about 0·2 million

CHAPTER VIII

of transit traffic (mainly downstream). Traffic with other riparian states was apportioned as follows —

	From Rumania	To Rumania
	'000 tons	
Germany	820	40
Austria	390	20
Czechoslovakia	440	30
Hungary	300	150
Yugoslavia	200	—
Bulgaria	80	3
	1,630	243

The composition of inland-water traffic has been fully analysed only at the Iron Gates, at the western end of the Danube's Rumanian course. In the traffic shown below, the upstream traffic consisted mainly of Rumanian exports, while the downstream traffic was made up of imports and transit traffic in approximately equal proportions.

Traffic in '000 metric tons at the Iron Gates —

	1938	1939
	Upstream	
Total	1,362·5	1,864·
of which (main items only):		
Timber	20·1	11·4
Iron	21·1	13·4
Wheat	30·3	300·0
Barley	49·8	68·0
Maize	25·1	125·1
Petroleum and its products	787·7	1,046·1
Salt	30·8	31·7
	Downstream	
Total	489·3	771·2
of which (main items only):		
Iron	77·2	22·2
Timber	67·6	86·5
Wheat	74·4	363·0
Maize and oats	79·6	28·2

Little is known about traffic since Rumania finally joined the Axis in 1941. As a whole, it is below pre-war level as a result of a great decrease in the amount of grain coming forward. This has been partly, but certainly not entirely, counterbalanced by a slight increase in oil traffic, by the probable diversion of rail traffic to the Danube and by military traffic. The most important individual traffics at the present time are as follows —

(a) Oil shipments from Giurgiu (i) upstream to Italy (50-70,000 tons a month), to Germany (possibly 30-50,000 tons a month), and (ii) downstream to German forces in South Russia (quantity unknown, but may be substantial).

(b) Downstream supplies of (i) coal to Rumanian railways (part only of total supply), and of (ii) military equipment, stores, etc., to South Russia (quantities unknown).

(c) Upstream supplies of (i) some S. Russian products, including grain (perhaps 20,000 tons a month) and possibly iron and manganese ore (quantities unknown), as well as of (ii) some small quantities of Rumanian exports of agricultural products.

2. Navigation

The Iron Gate Sector of the Danube between Orşova and Turnu Severin, with its rapids and reefs causing violent currents, is particularly difficult for navigation, and the use of specially

133 trained pilots is compulsory, while the barge tows
502 have to be broken up into smaller units. This sector of the Danube cannot be negotiated at night, which constitutes an enormous hindrance for large-scale traffic. In order to speed up the traffic, the use of suspension railways and locomotives on rails laid along the river bank was introduced before the war, but the system has met with only moderate success.

[503] Navigation in the Maritime sector of the Danube is affected by silting up—particularly in the autumn—and constant dredging has to be carried out in the Sulina branch to maintain sufficient depth for passage of vessels up to Galaţi. The depth of this sector was 24 ft. in 1939, permitting the entry of vessels of medium draught only. Danube navigation is held up for varying periods between November and March by ice, averaging 30-50 days, and occasionally even for 90 days.

499 There are no permanent bridges on the Danube to connect Rumania with Bulgaria. However, a Rumanian-Bulgarian Commission was established in 1942 to remedy this deficiency by arranging for the construction of a bridge, which will take five years to complete, between Giurgiu and Ruse. In the meantime a ferry system is in use between Giurgiu and Ruse carrying important supplies of oil for the German forces in Greece.

3. River Ports

503 There are in all some 38 river ports, of which the
504 most important, all on the Danube (from west to east) are as follows :—

Moldova	Oltenița
Orșova	Brăila
Turnu Severin	Galaţi
Giurgiu	Sulina

Since the war started considerable improvements have already been made on the Danube. This is of special significance for, though this waterway is of little use for Rumanian internal traffic, since the closing of the sea route between Rumania and North Germany, it has become vitally important for the carrying of bulky transport. As early as 1940 a scheme for the rationisation of Danube traffic was put into operation, and the installations of Giurgiu, the main Danube port for oil transport, were improved.

To avoid congestion at Giurgiu, the Danube ports of New Moldova and Orșova have been enlarged. Internal traffic has been diverted to Oltenița, which is also used for the unloading of incoming traffic. The construction of new harbour installations is being carried out by a German-Rumania company.

4. Organisation of Inland Water Shipping

505 Rumanian Danube shipping is under State
656 control, and organisation is carried out by firms which are partly State-owned and partly owned
[655] by private individuals. The most important company is the State-owned "N.F.R." (*Navigațiunea Fluvială Română*), and of lesser importance are the privately owned companies "S.R.D." (*S.A.R. de Navigație pe Dunăre*) and "Sind" (*Società Italiana di Navigazione Danubiana*).

505 All Rumanian shipping companies are members
648 of the Danube Shipping Pool, which is under German supervision, headed by the *Deutsche Donauschiffahrtsgruppe*, which is closely connected with the Hermann Goering-Werke für Binnenschiffahrt. The importance of the Danube Pool (exclusive of the Tanker Pool) will be realised when it is borne in mind that between 1932-1937 the freight carried annually by its vessels on the

Bulgaria EE1
Rumania ED1

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233 with straw roofs. They are rarely plastered with mud. In western Sredna Gora, transportable sheep pens are used (Gellert, 1937: 169).

RUMANIA

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648 In Rumania there exists a marked difference between settlements in the lowlands and those of the Carpathian Mountain region. While topography and the presence or absence of such building materials as stone, wood or clay are important factors, political considerations also played a significant role. With the beginning of the 18th century Greek influence became predominant in Moldavia and Wallachia. The Porte set up Greek rulers in these principalities, thus in reality the Rumanians were as much under Turkish dominion, although indirectly, as were the people of the Balkans. It was only after the rebellion of 1821 that Rumanian rulers were reinstated. During all periods of unrest and foreign invasion the mountains and forests served as areas of refuge; the Serbian hajduk has his counterpart in the Rumanian heydoick (Stratilesco, 1907: 30-34).

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361 Location and Types of Settlements. The older settlements were
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[133] in the nature of hamlets (cătîn). These were generally not built on the top of hills, but rather in depressions, on the edge of forests, and away from the military roads (Grothe, 1907: 54). In the hilly regions of Oltenia and Moldavia the villages were located close to a river or on the slope of a hill. Farmsteads are generally spaced fairly far apart, in no definite order. Villages may extend over two or three hills facing one another (Stratilesco, 1907: 205).
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[491] Villages in the Wallachian plains are located close to the roads. The prevalent type is the road village; buildings are located on either side of the highway which forms the main road of the village. Larger villages may have additional cross-roads (Jänecke, 1918: 7).
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[621] While mountain villages average a population of 350, the largest being around 700, villages of the plains average 700 and may reach 2000 (Grothe, 1907: 55).

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342 House Types. Due to the scarcity of wood and stone in the plains, buildings are generally constructed of wicker and daub, in
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[335] which technique the Rumanians are masters. The roof is made first, the walls afterwards. The principle posts are first set into the ground, then the studs of the outer walls and inner partitions are spaced at 1 to 2 foot intervals. After the roof has been formed walls are built up. Mud is kneaded down with the feet, mixed with straw, and shaped into lumps that take the place of bricks. These lumps are then set between the studs and left to dry (Stratilesco, 1907: 208). More often walls are of wickerwork, plastered inside and out with a mixture of mud, straw and cowdung to a thickness of 15-25 centimeters (Jänecke, 1918: 10). The rough walls are smoothed out by applying thinner and thinner layers of mud and cowdung mixture. They are then whitewashed inside and out. Floors of timber are recent; the floor is commonly of tamped earth.